

BUSINESS INTELLIGENCE ARCHITECT

1. PURPOSE OF POSITION

Taranaki District Health Board (DHB) is building a Business Intelligence platform to provide novel and informative views into the Clinical and Corporate data contained within multiple DHB and external systems.

The Business Intelligence (BI) Architect is a hands-on data analyst, technologist and designer who has experience in information management and data warehousing technologies to provide us with expertise in the areas of business intelligence, data analytics, data mining, visualisation, assessment of data quality and consistency across platforms, products for business and clinical areas.

This role is intended to lead the drive in the development and implementation of data architectures (islands, warehouse, and lakes), BI (and other data analytics technologies) as well as assist in developing relevant processes within our diverse Information Analytics team. In addition, this role will assist in the development in enhanced ETL and compliance reporting technologies and processes.

This role will be heavily involved in designing and developing user interface solutions for the consumption of analytical reports – such as dashboards, portals, views and so on.

To fulfil these duties, the BI Architect will require demonstrable strong past experience in data warehousing, SQL, data analytics, BI specific technologies, relevant coding technologies and ETL/extract creation and automation technologies.

2. ORGANISATIONAL VALUES

The Taranaki District Health Board’s (DHB) our mission (Te Kaupapa) is improving, promoting, protecting and caring for the health and well-being of the people of Taranaki. Taranaki DHB’s values define who we are as an organisation, the way we work with each other, our patients, whanau and external partners. Our Te Ahu Taranaki DHB values are:

Partnerships	WHANAUNGATANGA	We work together to achieve our goals
Courage	MANAWANUI	We have the courage to do what is right
Empowerment	MANA MOTUHAKE	We support each other to make the best decisions
People Matter	MAHAKITANGA	We value each other, our patients and whanau
Safety	MANAAKITANGA	We provide excellent care in a safe and trusted environment

3. DIMENSIONS

Reports to:	Manager, Information Management
Number of people reporting to you	-
Financial limits authority	-
Operating Budget	-

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4. WORKING RELATIONSHIPS

External	Internal
Ministry of Health Midland District Health Boards (Waikato District Health Board, Lakes District Health Board, Bay of Plenty District Health Board, Hauora Tairāwhiti Health. HealthShare Ltd Vendors	Customers and Users Business Intelligence (BI), Reporting and Development Team ICT Team Taranaki District Health Board Management.

5. ACCOUNTABILITIES

Key area of responsibility	Expected outcomes
<p>1. Data architecture, analytics and processing</p> <p>Design, develop and implement ETL processes to transform structured, unstructured and disparate source data into the target data store(s) / data warehouse(s) / data mart(s).</p>	<ul style="list-style-type: none"> • Defines and implements a strategic roadmap for enterprise data, data management and advanced data analytics systems. • Develop and document data sources, systems and integrations that support the clinical and non-clinical functions. • Develop relevant Data Warehouse and other data repository technologies, in collaboration and coordination with other individuals and groups, both within ICT Services, the wider DHB and other relevant agencies. • Investigates new opportunities and best practice solutions to optimise ways of working • Investigates and propose innovative ways of collecting, analysing and presenting data/views (e.g. Data Lakes, Machine Learning, BI Suites and so on).
<p>2. Data Management</p> <p>Establishes standards and guidelines for the design & development, tuning, deployment and maintenance of information, advanced data analytics and physical data technologies.</p>	<ul style="list-style-type: none"> • A solid understanding of key Data Management and Business Intelligence trends. • Works with information analysts and customers to understand the business requirements and business processes, design data warehouse (“DW”) schema and define extract-transform-load (“ETL”) and/or extract-load-transform (“ELT”) processes for DW. • Ensure Data Integrity and Data Quality frameworks are applied to our BI Infrastructure. • Provide data extract requested for external entities and ensure compliance. • Propose, develop, and deploy automation and assistive technologies to enhance existing processes, to support new processes and to introduce efficiencies where possible • Thoroughly document, detailed design documents, architecture, as-built, data dictionaries, implementation

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	plans and so on.
<p>2. End User Experience</p> <p>Design, Implement and manage portal, dashboards, analytic tools and reporting platform to deliver information to analysts and end users.</p>	<ul style="list-style-type: none"> • Architecting and developing BI and analytics, as well as user facing front end solutions (e.g. reporting, analytics, dashboards etc). • Provide knowledge, advice and support to Information Analysts with respect to data extraction, presentation and understanding. • Collaborate and develop end user requirements to assist in the development of presentation technologies. • Develop and demonstrate relevant PoC solutions to leadership for consideration. • Assist in the development of end user documentation, particularly around interpretation of analytics and reporting in plain-english format for end users.
<p>3. Service Delivery</p> <p>Ensure a professional quality customer service is provided to all customers.</p>	<ul style="list-style-type: none"> • Ability to deliver successful solutions to enable business information capabilities. • The ability to manage the ongoing work of a BI development team, balancing projects and BAU activities. • Build a partnership relationship with members of the Information Analytics team, the wider ICT Services team and other stakeholders across the organisation, regionally and nationally. • Coordinate with Project Managers for focused delivery of solutions. • Provide effective support and advice to colleagues, stakeholders and customers as required. • Advocate for and demonstrate a high standard of customer service at all times. • Ensure adherence to relevant Change Control policies, and other standards/practices related to release progression. • Ensure staff is informed of changes to systems, analytic tools and procedures as appropriate. • Close coordination with Service Delivery for outages, deployments and so on.

Organisational Accountabilities	Expected Outcome for all employees
<p>Health Equity</p>	<p>The TDHB strives to eliminate health inequalities and achieve health equity for the Taranaki population. In practical terms this means all staff are required to implement relevant health equity policies, procedures, approaches and guidelines issued from time to time including:</p> <ul style="list-style-type: none"> • the Pae Ora Framework which requires: <ul style="list-style-type: none"> ○ Demonstrating the principles of Partnership, Participation and Protection under the Treaty of Waitangi; ○ improving understanding of the determinants of ethnic inequalities in health, in particular the “Drivers of ethnic inequalities in health” and the “Pathways to

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Organisational Accountabilities	Expected Outcome for all employees
	<p>Inequalities” both of which are referenced in the TDHB Pae Ora Framework, Appendix 1;</p> <ul style="list-style-type: none"> ○ Ensuring Health Equity assessment is embedded into your practise where services, policies or programmes are expected to improve outcomes for Māori; ○ Effectively implementing health equity approaches outlined for Health Professionals in “Equity of Health Care for Maori: A Framework” published by the Ministry of Health to support He Korowai Oranga Refresh 2014, national Maori Health Strategy; ○ Ensuring appropriate health literacy responses are used for effective engagement with Māori; <ul style="list-style-type: none"> ● You must ensure accurate ethnicity data is collected or held for patients and clients you interact with by following the TDHB Ethnicity Data Collection Policy and procedures; ● You must attend the Cultural Competency training provided by and for staff of the TDHB including Treaty of Waitangi workshop, General/Clinical Refreshers, Engaging Effectively with Maori and any other training identified as essential for staff.
<p>Health and Safety</p>	<ul style="list-style-type: none"> ● Maintains a safe and healthy environment ● Complies with health & safety policies and procedures ● Carries out work in a way that does not adversely affect their health and safety or that of other workers ● Complies with procedures and correctly use personal protective equipment and safety devices provided ● Contributes to hazard identification and management process ● Reports accurately near misses/incidents/accidents in a timely manner ● Participates in health and safety matters
<p>Personal Development</p>	<ul style="list-style-type: none"> ● Fully contributes to the individual’s team performance and is committed to identify and pursue opportunities for developing new knowledge and skills. ● Participates in the performance appraisal process where personal performance and development is reviewed. ● Willing to accept new responsibilities, acquire and demonstrate relevant new knowledge.

6. VARIATION TO DUTIES

Duties and responsibilities described above should not be construed as a complete and exhaustive list as it is not the intention to limit in any way the scope or functions of the position. Duties and responsibilities can be amended from time to time either by additional, deletion or straight amendment to meet any changing conditions, however this will only be done in consultation with the employee.

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7. CAPABILITY REQUIREMENTS

Capabilities are the behaviours demonstrated by a person performing the job. Capabilities identify what makes a person most effective in a role. Those listed below are expected for the **ICT Team** roles in the organisation. The required capabilities can change as the organisation develops and the roles change.

Capability
Effective Communication Shares well thought out, concise and timely information with others using appropriate mediums. Ensures information gets to the appropriate people within the organisation to facilitate effective decision making
Decision Making/Problem Solving Demonstrates effective and timely decision making/problem solving techniques. Aware of the impact of decisions on key stakeholders and consults as appropriate utilizing available resources. Is proactive and effective when problem solving is required.
Innovation/Initiative Continually strives for new and improved work processes that will result in greater effectiveness and efficiencies. Questions traditional ways of doing things when choosing a course of action or finds new combinations of old elements to form an innovative solution.
Resilience/Flexibility Articulates differing perspectives on a problem and will see the merit of alternative points of view. Will change or modify own opinions and will switch to other strategies when necessary. Adjusts behaviour to the demands of the work environment in order to remain productive through periods of transition, ambiguity, uncertainty and stress.
Cultural Safety Demonstrates a commitment to cultural safety by meeting and exceeding the cultural needs of clients/customers/colleagues. Manages cultural ambiguity and conflicting priorities well. Understands concepts of whanaungatanga and manaakitanga and Maori cultural orientation to whanau, hapu and iwi.
Teamwork Works to build team spirit, facilitates resolution of conflict within the team, promotes/protects team reputation, shows commitment to contributing to the teams success

8. EDUCATION

- A relevant tertiary qualification (e.g. Computer Science, Mathematics, Statistics, Computer Engineering) and/or equivalent experience.

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9. SKILLS

- Strong interpersonal and communication skills
- Ability to relate and communicate effectively in both the technical and business settings to stakeholders and colleagues from different backgrounds and levels of understanding. The ability to speak in 'plain English' to describe abstract technology and data concepts to non-technical users.
- Strong foundation in multidimensional data modelling, such as star schemas, snowflakes, normalized and de-normalized models, handling "slow-changing" dimensions/attributes.
- Experience in discovering organisational and user requirements and transform through data processing. Bringing all aspects of data, analytics and UI together to present data to meet the needs of the audience.
- Strong working knowledge of SQL query language, SQL Server 2016 and other Relational Database Management System (RDBMS).
- Strong development skills, relevant to data warehousing, analytics, reporting and related technologies.
- Demonstrable enterprise-level documentation capabilities (architecture, as-builts, proposals, data dictionaries and so on).
- Ability to manage multiple priorities, be flexible and have excellent time management.
- High level of emotional intelligence and interpersonal skills.
- Extremely strong analytical and problem-solving skills.

10. EXPERIENCE

- Relevant experience in the New Zealand health sector preferred
- 3 years or more in relevant enterprise data warehouse and BI development roles is required.
- Extensive experience with Microsoft BI technologies including SSIS, SSRS and Power BI.
- Knowledge of Microsoft SharePoint would be advantageous.
- Experience with Microsoft Azure is an advantage.